~~glands, so~~ frequent in dental caries, is most probably due to an erosion of the surrounding gum tissue.

The faucial tonsil drains its lymph into a gland which, when enlarged, is palpable just below and behind the angle of the jaw. This gland may be differentiated from the submaxillary glands by its freedom of motion posteriorly. It is true that the submaxillary glands may drain into this very same gland belonging to the internal group, but in cases of tooth infection the submaxillary glands are enlarged, as well as the tonsillar glands. Faucial tonsillitis causes an enlargement of this gland primarily. Subsequently it is possible for the lower glands of the deep cervical group to become involved.

Infections entering through the pharyngeal tonsil involve the lymph glands placed just beneath the posterior border of the sternocleidomastoid. The muscular covering of these glands sometimes makes it almost impossible to palpate them, so that the first distinct glandular node that may be perceptible to palpation is one on the anterior border of the muscle. Clinically, the enlargement of these glands may be diagnosed by a diffuse swelling over the upper part of the sternocleidomastoid muscle. This swelling is due to the enlargement of the glands underneath the muscle.

BELLADONNA POISONING DUE TO BELLADONNA PLASTERS.

By C. M. Doland, M.D.,
OF PHILADELPHIA.

Scant consideration is given this subject by the text-books on therapeutics and the practice of medicine, but it is a subject of practical importance, owing to the common use of belladonna plasters. H. C. Wood says: "Constitutional symptoms are readily produced by the free external use of belladonna plasters or ointment, and patients should be warned always to remove the plasters if dryness of throat or disorders of vision come on." As these plasters are so often applied by the patient on his own initiative, serious symptoms of poisoning may develop before he comes under medical care, as in my first case, and even then the history may be such that no mention is made of the use of the plaster. The following case occurred in the medical service of Dr. Stengel in the Pennsylvania Hospital, and I am indebted to him for permission to report it:

Case I.—W. B., white, male, aged forty-seven years, brought to the hospital by the police. "On admission patient is wildly delirious and is continually tossing about, necessitating his being strapped in bed. Pupils are widely dilated and do not react to light. Patient has a diffuse erythematous eruption on chest and back; it is not punctate and does not fade on pressure. On his shoulder, back, and abdomen are four belladonna plasters. He vomited a small amount of brown fluid, which did not smell of alcohol. His mouth and tongue are dry and the inner surface of his lips feel dry and parched. Pulse rapid, 144, and wiry; temperature, 98.2°; respirations, 28. Physical examination otherwise negative. Diagnosis of belladonna poisoning based on condition of pupils, rash, dryness of mouth, and the presence of the plasters." Plasters removed at once. 1 A.M., three hours later: Patient is more nearly rational; straps removed; complains of dryness of mouth and throat. Next morning: Patient slept quietly after 1 A.M., when he was given morphine, gr. $\frac{1}{6}$, hypodermically. Rash has practically disappeared; patient still complains of dryness of mouth and throat and of difficulty in swallowing. Pupils dilated and react partially, though sluggishly, to light. On attempting to accommodate for distance patient says it causes him discomfort. He cannot read ordinary print held eight to twelve inches from his eyes, but can if it is held at double this distance. Two days later: Patient's throat is greatly congested and there is a grayish-white exudate on the uvula. This exudate cleared up in two days' time, and at that time pupillary reflexes were normal and general condition good.

NOTE.—He had been wearing two of the plasters for several days, but two more had been applied late that afternoon, after his back had been briskly rubbed with a coarse towel.

CASE. II.—Occurred in the practice of Dr. Stengel, who kindly furnished me the following notes: "I was called to see Dr. B. B. W. and found him in a state of stupor or semiconsciousness. From time to time he talked incoherently or muttered. His speech was somewhat thick, so that the suspicion of an apoplectic condition was naturally entertained. I was told that this state of things had begun some time in the night, and that he had been found in the morning as I found him later. His face was flushed, his pulse full and bounding and quite rapid. His temperature was moderately elevated, being about 99° to 100°. It was found that he had placed two belladonna plasters over his back, on account of some rheumatic pains, and these had been in place for several days. After our suspicions were aroused and the plasters removed his condition gradually improved. The erythematous rash, which spread from the face to the upper part of the body, subsided. The mouth which had beome dry grew moist, and gradually his stuporous condition cleared up. Two or three days, however, elapsed before he was quite himself again."

CASE III.—Occurred in the Germantown Hospital. A small belladonna plaster was placed on the chest of a female patient. About two hours later she was reported to me, and I found that she was in a highly excitable state: pupils dilated, mouth dry, and a diffuse, erythematous rash on face, shoulders, and chest. The plaster was removed, and in a few hours the rash had faded and her excitable condition had ceased. As atropine is so rapidly eliminated, the removal of the belladonna plaster will probably be rapidly followed by a cessation of symptoms in most cases, and any further treatment would consist in the administration of the physiological antidotes of atropine.

A BACTERIOLOGICAL STUDY OF THE CERTIFIED MILK OF PHILADELPHIA.

By A. H. Stewart, M.D.,
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The term certified milk is used to cover that milk with which a certificate is furnished guaranteeing the purity of the milk.

The desire on the part of physicians especially interested in diseases of children to obtain a safe milk supply for the feeding of infants led to the formation of the Milk Commission of the Pediatric Society in 1899.

This Commission appoints experts to examine the dairies and the milk sent out from them.

The presence of disease among the cows; the cleanliness of the dairy; the health of the employés; the chemical composition and the bacteriological content of the milk are matters over which the Commission exercises supervision.

The Commission selects a veterinary inspector, a chemist, and a bacteriologist to examine the cows and the milk.

The bacteriologist procures specimens of milk from delivery wagons at intervals of not longer than one month and without previous notice to the dairy.

The milk must be free from dirt, pus, and injurious organisms, and shall not contain more than 10,000 germs per cubic centimetre to be considered up to the required standard of purity from a bacteriological standpoint.

The chemist procures specimens and examines the milk for percentage of proteids, fat, sugar, mineral matter, and water present. He also tests its chemical reaction, specific gravity, and for the presence of added coloring matter and preservatives.

Standard milk shall range from 1029 to 1034 specific gravity, be neutral or faintly acid in reaction, contain not less than 3.5 per cent. to 4.5 per cent. proteid; from 4 to 5 per cent. sugar, and not less than 3.5 to 4.5 per cent. fat. It shall not contain preservatives or any foreign coloring matter, and shall not be heated.

The veterinarian inspects, without previous warning, the cleanli-